ASEPCO

Weirless Radial diaphragm valves

Bioprocessing valves that minimize contamination risk and save 80% maintenance time

WATSON MARLOW Fluid Technology Solutions

ASEPCO: Dedicated to quality

ASEPCO was established in 1989 with a single mission: to make the world's best valves for aseptic processing.

Since then, biotechnology and pharmaceutical professionals have come to realize a well designed, precisely built valve saves time and money, and reduces risk. We've grown and today we manufacture the aseptic processing industry's valve of choice.

When you entrust your process fluid to an ASEPCO valve, we take that responsibility seriously. We ensure every aspect of our process—from the raw material to fast, convenient delivery to your door—meets your needs.

Fully traceable materials

Valves are made from fully traceable materials, regardless of the type of alloy you choose ensuring they meet your local standards and codes.

Long-lasting surface finish

Each valve is fully machined, electropolished and passivated as standard giving you a consistent, long-lasting surface finish.

Saves you time and money

Our valves are designed to save you time and money. Changing a diaphragm only takes seconds, making our valves simple to inspect, clean, and use.

Quality you can rely on

We inspect every valve—not just a representative sample. Each valve has passed stringent quality tests at every stage of production.

Contamination-free and consistently dependable

Around the world, ASEPCO Weirless Radial diaphragm™ valves deliver consistency in biotechnology and pharmaceutical processes while reducing maintenance time by up to 80%. Their unique construction and radial diaphragm design makes them completely drainable and virtually eliminates the risk of contamination.

ASEPCO valves are designed to minimize risk. Changing a diaphragm takes seconds, with no need for special tools or training, and a simple Tri-Clamp® assembly makes inspection fast and easy. Every surface material that touches your process fluid is manufactured to comply with multiple global industry standards, safeguarding you and your process.

Designed to save you time

- Patented radial diaphragm, eliminates entrapment for easy cleaning
- In-line valve features a 180 degree install angle with full drainability in multiple orientations
- Tank-bottom valves with up to three ports for CIP/SIP or flushing while closed
- Simple Tri-Clamp assembly makes maintenance 80% faster
- Every valve serialized and laser-etched
- Integrated travel stops
- No readjustment or retightening

Efficiency by design

Every aspect of an ASEPCO valve is designed to minimize contamination risk, reduce maintenance and lower lifetime cost.

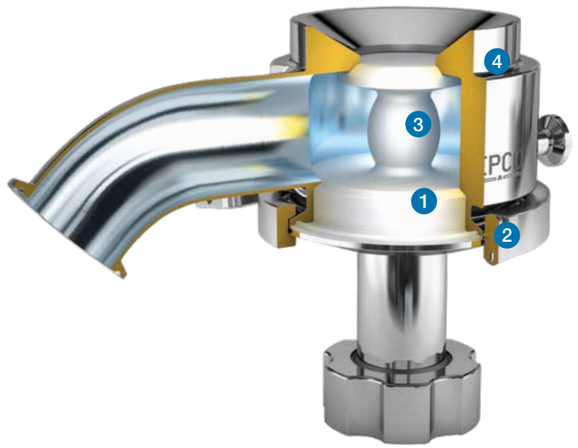
Weirless Radial diaphragm in-line valves

ASEPCO in-line valves are built around our patented radial diaphragm that forms two seals in one. This Weirless Radial architecture virtually eliminates the risk of contamination by entrapment, and makes cleaning fast and easy.

1. **Patented static radial shoulder seal**
   Simple, uniform sealing every time
2. **Restriction-free drainability**
   Fully drainable in multiple orientations
3. **Simple Tri-Clamp assembly**
   Allows for 80% faster maintenance
4. **Strong and lightweight actuators**
   Manual or pneumatic options

Weirless Radial diaphragm tank valves

ASEPCO tank valves are also built around our patented radial diaphragm. Valves can be welded truly flush to the bottom of your tank with no need for gaskets, bolts or seams. With our flexible design and manufacturing approach, we can customize valves to suit your needs.



1. **Patented static radial shoulder seal**
   Supports full drainability and provides simple, uniform sealing every time
2. **Simple Tri-Clamp assembly**
   Makes inspection fast and easy
3. **Weirless Radial diaphragm**
   Virtually eliminates the risk of contamination by entrapment
4. **Weld flange**
   Heavy-duty, extra thick flange that helps prevent warping during installation

Valves specific to your application

Within our two valve ranges (in-line and tank) we offer up to five different valve styles with a variety of configurations and material choices. Our tank valve range covers the most common sizes from 0.5” through 4”, while our in-line valve range is made up of 0.5” to 2” sizes.

Fully tested and traceable

- Compliant with ASME BPVC, ASME BPE, CRN and CE-PED
- Supplied with material test reports
- Every valve serialised and laser-etched
- 316L stainless steel dual certified to EN 1.4435 and ASME SA479 (also available in other materials)

Weirless Radial diaphragm in-line valves

Designed to accelerate and simplify change-over times, the weirless in-line valve series has been developed with time and cost savings in mind.

- Configured to suit with clamp-end or weld-end connections, or a secondary valve
- Complete fluid isolation
- Easy to assemble and inspect: Eliminates sources of contamination and reduces cleaning time
- Clean, self-draining design
- Defined shoulder seal ensures contamination-free processing

In-line valve

Composed of a forged body, the in-line valve is designed to provide a less restrictive flow path over traditional weir style valves. The weirless design also eliminates the potential of trapping material through our innovative, industry-leading shoulder seal design.

Every surface material that touches your process fluid is manufactured to comply with multiple global industry standards, safeguarding you and your process.

- Available in sizes ASME BPE: 0.5”, 0.75”, 1”, 1.5”, 2”
  DIN 11866, DIN 32676 Series A: DN 10, DN 15
- One minute diaphragm change-over
- Easy to install and never needs adjusting or re-tightening
- Fully drainable in multiple orientations
- Drop-in replacement for most common diaphragm (weir-style) valves
- Available with EPDM and silicone diaphragms.

Sterile access valve

Minimise hold-up volume, with two flow paths in one efficient valve.

- Sterile access: Eliminates fittings and saves time, space, and money.

Block-and-bleed valve

We’ve eliminated the usual dead leg between seal points, in a reliable block-and-bleed valve.

- Block-and-bleed: Eliminates sources of contamination and reduces cleaning time.

Weirless Radial diaphragm tank valves

Our tank valves are designed specifically to meet the stringent requirements of the bioprocessing industry. We offer several options to help solve the most challenging applications.

It is easy to weld our valves truly flush to the bottom of your tank with our heavy-duty, thick weld flange. There are no gaskets, bolts or seams.

Can’t find what you need? Our experienced engineers will develop a custom valve configuration to meet your specific processing needs.

Tank-bottom valve

The leading aseptic tank-bottom valve. Machined from bar material, the tank valve is available in multiple configurations. Like our in-line weirless design, the tank valve also eliminates the potential of trapping material through our innovative, industry-leading shoulder seal design. Every surface material that touches your process fluid is manufactured to comply with multiple global industry standards, safeguarding you and your process.

- Available in sizes, 0.5”, 1”, 1.5”, 2”, 3”, 4”
- One minute diaphragm change-over
- Easy to install and never needs adjusting or re-tightening
- Available with EPDM, Silicone, Viton and PTFE

Sterillite valve

An integrated steam valve has been added to our best-selling tank-bottom valve. This allows steam-in-place or flush through, without dead legs.

Sample valve

Our hydrodynamic design gives you clean, consistent sampling every time. The behind-the-seat-flow path allows for easy clean-in-place/steam-in-place between samples.

Process valve

A valve with a simple clamp connection for easy installation in your piping systems. Optional clean-in-place port allows steam-in-place or flush through, without dead legs.

Point-of-use valve

Created for low-point draining or sampling in piping systems, this valve eliminates dead legs and helps promote drainage.

Divert valve

Designed to allow division and blending of two or three fluid paths in a single assembly. This valve eliminates dead legs.

Strong and lightweight actuators

The ASEPCO AKS actuator series** for the in-line and tank valves is a durable, easy to maintain actuator made of a plastic housing and stainless steel diaphragm interface. The resulting actuator is a hygienic design which is GMP-compliant.

Our tank valves are also available in the ASEPCO AJS actuator series, an all stainless steel actuator providing all the same performance, but in a heavy-duty package.

Both series offer manual and pneumatic options, are provided with laser-etched serial numbers for traceability, and carry a market-leading three year warranty.

The operation of AJS and AKS pneumatic actuators can be automated using ASEPCO switches, or any manufacturers' linear switch and controller without the need for modification.

AJS Series

AKS Series

Long-lasting, quick-change diaphragms

The valve diaphragm can be changed in seconds, without special training or tools. Customers tell us this reduces maintenance time by as much as 80% compared to other valve technologies. Our patented, radial shoulder seal design gives consistent, leak-free, uniform sealing.

Our diaphragms are USP Class VI tested and approved. They undergo extensive steam and lifetime testing using ASME BPE standard process test conditions with at least 100 hours at a continuous 270-279F (132-137C), with actuation every 20 minutes.

- Extensively tested to ensure long service life
- Patented, leak-free static shoulder seal
- High performance with minimal maintenance

Diaphragm materials for every temperature, pressure and chemical challenge

Diaphragms are offered in eight different materials to cover every biotechnology and pharmaceutical application. Each material has been extensively tested to ensure longevity. Every diaphragm is marked with its cure date and batch number for complete traceability.

Silicone††	EPDM††	Viton A	Viton GF
Silicone Plus	EPDM Plus††	Viton A (steam-resistant)	PTFE

*** ASEPCO AKS actuator series only available on 0.5-1.5" sizes*

†† *Diaphragms only available in Silicone, EPDM and EPDM Plus for in-line valves. All materials available for tank-bottom valves.*

World class support

Watson-Marlow Fluid Technology Solutions (WMFTS) is a global group of quality-focused brands each leading in different aspects of fluid path technologies. With sector specialists located in our local sales companies across the globe, we're able to offer the highest levels of service and technical support worldwide.

We are dedicated to delivering our products on time to meet your production timelines and accelerate your speed to market and they're backed by the strongest guarantees in the industry.

Need guidance on your application? Our sales engineers can help you choose, configure, or custom engineer the perfect valve solution for your requirements.

Market-specific solutions

Biotechnology and pharmaceutical processes are among the most critical in the world. Watson-Marlow Fluid Technology Solutions allows you total connectivity along your fluid path. Connecting vessel to vessel with Watson-Marlow peristaltic pumps, Watson-Marlow Tubing, BioPure single-use components, FlowSmart gaskets and ASEPCO Weirless Radial diaphragm valves all work towards delivering repeatable and consistent performance throughout your fluid handling processes.

WATSON MARLOW Fluid Technology Solutions

BIOTECHNOLOGY AND PHARMACEUTICAL SOLUTIONS

WATSON MARLOW Pumps | WATSON MARLOW Tubing | Flexicon Liquid Filling | bioPURE | ASEPCO | AFLEX HOSE

Watson-Marlow Fluid Technology Solutions

Watson-Marlow Fluid Technology Solutions supports its customers locally through an extensive global network of direct sales operations and distributors

wmfts.com/global

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